

ABSTRACT

The present invention relates to a wetness monitoring system that includes a data collection device that sends wetness measurement data to a central computer that detects changes in wetness measurement data caused by the presence of urine or other dielectric fluids. The data collection device includes a semi-reusable sensor and reusable data collector that are worn on a garment of the person. The data collector includes an internal power source so that the person can live a normal ambulatory life. The data collector has an electrical circuit that uses the changing resistance characteristics in the sensor to gather wetness measurement data. The data collector periodically generates and transmits a signal containing the actual wetness measurement data. The signals are coded to identify the particular data collector or person sending the signal. The data collector is programmed to conserve power by sending signals less frequently during periods when the sensor is clearly dry. Signals are sent more frequently when the sensor is damp or a wetness event may have occurred. The central computer receives the signals containing the wetness measurement data and compares the measurement data to an adjustable wetness sensitivity level to determine if a wetness event has occurred. When the central computer determines that a wetness event has occurred, the computer displays the name of the particular person wearing the data collector and the approximate time that the wetness event occurred. The system then pages an appropriate healthcare worker to inform them that the particular individual needs attention and tracks the approximate response times to ensure that the patient is continuously receiving prompt care.